

**WHAT IS CLAIMED IS:**

- 1 1. A method of handling client state information, said  
2 method comprising:  
3 receiving, at a first computer system, a first request  
4 from a second computer system, wherein the first  
5 request is received over a computer network;  
6 identifying access control data pertaining to the  
7 second computer system;  
8 creating an encrypted value based upon the access  
9 control data; and  
10 storing, on the second computer system, a state  
11 management data structure that includes an access  
12 control identifier and the encrypted value.
- 1 2. The method of claim 1 further comprising:  
2 authenticating a user of the second computer system;  
3 and  
4 caching, on the first computer system, security  
5 attributes of the authenticated user that are too  
6 sensitive to be included in the state management data  
7 structure, wherein the cached security attributes are  
8 indexed by the encrypted value and wherein cached  
9 security attributes are adapted to re-establish a  
10 security context of the authenticated user.
- 1 3. The method of claim 1 wherein the access control  
2 identifier is selected from the group consisting of

3 the access control data and a unique identifier used  
4 by the first computer system to map to the access  
5 control data stored on an authentication server.

1 4. The method of claim 1 wherein at least one field  
2 included in the access control data is selected from  
3 the group consisting of: a domain, a maximum age, a  
4 path, a port, an authentication strength value, an  
5 authenticating server identifier, and an access  
6 control privilege identifier.

1 5. The method of claim 1 wherein the creation of the  
2 encrypted value further comprises:  
3 hashing the access control data using a hashing  
4 algorithm, the hashing resulting in a hash value; and  
5 encrypting the hash value.

1 6. The method of claim 1 further comprising:  
2 storing the encrypted value at the first computer  
3 system in response to receiving the first request;  
4 receiving a second request from the second computer  
5 system;  
6 retrieving the state management data structure from  
7 the second computer system, the retrieving performed  
8 in conjunction with the reception of the second  
9 request; and  
10 comparing the encrypted value included in the  
11 retrieved state management data structure with the  
12 encrypted value stored at the first computer system.

1 7. The method of claim 6 further comprising:

2 re-establishing an authenticated user's security  
3 context by using the encrypted value as a key to  
4 retrieve the access control data cached on the first  
5 computer system.

1 8. The method of claim 1 further comprising:

2 authenticating a user of the second computer system,  
3 wherein the identifying, creating, and storing are  
4 performed in response to successfully authenticating  
5 the user.

1 9. The method of claim 8 further comprising:

2 determining that the third computer system does not  
3 have access to the authentication data;

4 retrieving the authentication data from an  
5 authentication server in response to the  
6 determination; and

7 storing the retrieved authentication data on a cache  
8 associated with the third computer system.

1 10. The method of claim 1 further comprising:

2 receiving, at the first computer system, a second  
3 request from the second computer system;

4 retrieving the state management data structure from  
5 the second computer system, the retrieving performed  
6 in conjunction with the reception of the second  
7 request;

8       determining that the retrieved state management data  
9       structure is stale based on a timestamp included in  
10      the state management data structure; and  
  
11      authenticating a user of the second computer system in  
12      response to the determination.

1    11.   An first information handling system comprising:  
  
2       one or more processors;  
  
3       a memory accessible by the processors;  
  
4       a network interface connecting the information  
5       handling system to a computer network;  
  
6       a tool for handling client state information, the tool  
7       including software effective to:  
  
8           receive, at the first information handling  
9           system, a first request from a second information  
10          handling system, wherein the first request is  
11          received over a computer network;  
  
12          identify access control data pertaining to the  
13          second information handling system;  
  
14          create an encrypted value based upon the access  
15          control data; and  
  
16          store, on the second information handling system,  
17          a state management data structure that includes  
18          an access control identifier and the encrypted  
19          value.

1    12.   The information handling system of claim 11 further  
2       comprising software effective to:

3       authenticate a user of the second information handling  
4       system; and  
  
5       cache, on the first information handling system,  
6       security attributes of the authenticated user that are  
7       too sensitive to be included in the state management  
8       data structure, wherein the cached security attributes  
9       are indexed by the encrypted value and wherein cached  
10      security attributes are adapted to re-establish a  
11      security context of the authenticated user.

1   13.   The information handling system of claim 11 wherein  
2       the access control identifier is selected from the  
3       group consisting of the access control data and a  
4       unique identifier used by the first information  
5       handling system to map to the access control data  
6       stored on an authentication server.

1   14.   The information handling system of claim 11 wherein at  
2       least one field included in the access control data is  
3       selected from the group consisting of: a domain, a  
4       maximum age, a path, a port, an authentication  
5       strength value, an authenticating server identifier,  
6       and an access control privilege identifier.

1   15.   The information handling system of claim 11 wherein  
2       the creation of the encrypted value further comprises  
3       software effective to:  
  
4       hash the access control data using a hashing  
5       algorithm, the hashing resulting in a hash value; and  
6       encrypt the hash value.

1 16. The information handling system of claim 11 further  
2 comprising software effective to:  
3 store the encrypted value at the first information  
4 handling system in response to receiving the first  
5 request;  
6 receive a second request from the second information  
7 handling system;  
8 retrieve the state management data structure from the  
9 second information handling system, the retrieval  
10 performed in conjunction with the reception of the  
11 second request; and  
12 compare the encrypted value included in the retrieved  
13 state management data structure with the encrypted  
14 value stored at the first information handling system.

1 17. The information handling system of claim 16 further  
2 comprising software effective to:  
3 re-establish an authenticated user's security context  
4 by using the encrypted value as a key to retrieve the  
5 access control data cached on the first information  
6 handling system.

1 18. The information handling system of claim 11 further  
2 comprising software effective to:  
3 authenticate a user of the second information handling  
4 system, wherein the identifying, creating, and storing  
5 are performed in response to successfully  
6 authenticating the user.

1 19. The information handling system of claim 18 further  
2 comprising software effective to:  
3 determine that a third information handling system  
4 does not have access to the authentication data;  
5 retrieve the authentication data from an  
6 authentication server in response to the  
7 determination; and  
8 store the retrieved authentication data on a cache  
9 associated with the third information handling system.

1 20. The information handling system of claim 11 further  
2 comprising software effective to:  
3 receive, at the first information handling system, a  
4 second request from the second information handling  
5 system;  
6 retrieve the state management data structure from the  
7 second information handling system, the retrieving  
8 performed in conjunction with the reception of the  
9 second request;  
10 determine that the retrieved state management data  
11 structure is stale based on a timestamp included in  
12 the state management data structure; and  
13 authenticate a user of the second information handling  
14 system in response to the determination.

1 21. A computer program product stored on a computer  
2 operable media for handling client state data, said  
3 computer program product comprising:

4 means for receiving, at a first computer system, a  
5 first request from a second computer system, wherein  
6 the first request is received over a computer network;  
7 means for identifying access control data pertaining  
8 to the second computer system;  
9 means for creating an encrypted value based upon the  
10 access control data; and  
11 means for storing, on the second computer system, a  
12 state management data structure that includes an  
13 access control identifier and the encrypted value.

1 22. The computer program product of claim 21 further  
2 comprising:  
3 means for authenticating a user of the second computer  
4 system; and  
5 means for caching, on the first computer system,  
6 security attributes of the authenticated user that are  
7 too sensitive to be included in the state management  
8 data structure, wherein the cached security attributes  
9 are indexed by the encrypted value and wherein cached  
10 security attributes are adapted to re-establish a  
11 security context of the authenticated user.

1 23. The computer program product of claim 21 wherein the  
2 access control identifier is selected from the group  
3 consisting of the access control data and a unique  
4 identifier used by the first computer system to map to  
5 the access control data stored on an authentication  
6 server.



1 24. The computer program product of claim 21 wherein at  
2 least one field included in the access control data is  
3 selected from the group consisting of: a domain, a  
4 maximum age, a path, a port, an authentication  
5 strength value, an authenticating server identifier,  
6 and an access control privilege identifier.

1 25. The computer program product of claim 21 wherein the  
2 means for creating the encrypted value further  
3 comprises:

4 means for hashing the access control data using a  
5 hashing algorithm, the hashing resulting in a hash  
6 value; and

7 means for encrypting the hash value.

1 26. The computer program product of claim 21 further  
2 comprising:

3 means for storing the encrypted value at the first  
4 computer system in response to receiving the first  
5 request;

6 means for receiving a second request from the second  
7 computer system;

8 means for retrieving the state management data  
9 structure from the second computer system, the means  
10 for retrieving performed in conjunction with the  
11 reception of the second request; and

12 means for comparing the encrypted value included in  
13 the retrieved state management data structure with the  
14 encrypted value stored at the first computer system.

1 27. The computer program product of claim 26 further  
2 comprising:

3 means for re-establishing an authenticated user's  
4 security context by using the encrypted value as a key  
5 to retrieve the access control data cached on the  
6 first computer system.

1 28. The computer program product of claim 21 further  
2 comprising:

3 means for authenticating a user of the second computer  
4 system, wherein the identifying, creating, and storing  
5 are performed in response to successfully  
6 authenticating the user.

1 29. The computer program product of claim 28 further  
2 comprising:

3 means for determining that the third computer system  
4 does not have access to the authentication data;

5 means for retrieving the authentication data from an  
6 authentication server in response to the  
7 determination; and

8 means for storing the retrieved authentication data on  
9 a cache associated with the third computer system.

1 30. The computer program product of claim 21 further  
2 comprising:

3 means for receiving, at the first computer system, a  
4 second request from the second computer system;

5 means for retrieving the state management data  
6 structure from the second computer system, the means  
7 for retrieving performed in conjunction with the  
8 reception of the second request;

9 means for determining that the retrieved state  
10 management data structure is stale based on a  
11 timestamp included in the state management data  
12 structure; and

13 means for authenticating a user of the second computer  
14 system in response to the determination.